



## Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Groundwater Discharge Permits

# BRP WP 05 Experimental or Alternative Treatment Technology or Permits Requiring Groundwater Reclassification Instructions and Supporting Materials

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## Table of Contents

- introduction
- guidance
- permit fact sheet
- completeness checklist
- DEP addresses and phone numbers

## Introduction

DEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the DEP Web site at [mass.gov/dep](http://mass.gov/dep) in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

*Instructions & Support Materials* files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

*Permit Applications* in Microsoft Word™ format must be downloaded separately. Users with Microsoft Word™ 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF™ format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Guidance**

---

**Guidelines for Hydrogeologic Evaluations**

These guidelines are to be followed when producing a hydrogeologic evaluation as part of a groundwater permit application. This evaluation must be completed in addition to the monitoring well plan required of all groundwater discharge permits and the engineering report.

**A. Historical Review.** Provide the following information concerning activities that have occurred previously at the site.

- 1) Provide site plan and locus map of appropriate scale.
- 2) List all chemicals previously used, stored, and maintained at the site with a description of their physical and chemical characteristics; solubility, specific gravity, soil bonding characteristics, etc.
- 3) Describe the method of disposal utilized for chemicals.
- 4) The piping and plumbing plans should include:
  - a. subsurface piping;
  - b. floor drains;
  - c. any subsurface storage tanks;
  - d. dry wells.
- 5) Provide engineering plans for all subsurface utilities, including gas lines, water lines, storm sewer lines, septic tank leaching field and associated plumbing, telephone lines and roof/vent drains.
- 6) For previous subsurface work, please include these items:
  - a. soil or water quality work;
  - b. soils information from deep hole tests, soil borings, septic tank installation or monitoring wells;
  - c. water levels, if available;
  - d. water table fluctuation information;
  - e. seasonal and tidal influences on water table fluctuation.

**B. Regional Survey.** Provide the following information concerning water supplies and geologic data for the area of this facility.

- 1) Determine location and use of existing and potential public groundwater supply wells within one mile of the facility. Provide the following items:
  - a. historical and anticipated pump rates, pumped volumes and pumping durations for existing and proposed public water supply wells;
  - b. zone of contribution (Zone II) information generated for public supply wells or interim protective zone, 1 mile radius from discharge point;
  - c. well construction, depth and related soils information;



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Guidance**

---

- d. information on areas under investigation for water supply purposes;
  - e. historical water quality data.
- 2) Determine location and use of surface water supply areas within one mile of the facility. Provide the following items:
- a. contributing watershed areas;
  - b. supply volumes and pumping system;
  - c. anticipated use;
  - d. areas under investigation as potential surface water supplies;
  - e. historical water quality data.
- 3) Determine location of private wells within 1/4 mile of the facility. Provide the following items:
- a. bedrock or overburden wells;
  - b. well depth (if available);
  - c. potentially developed areas that may utilize private wells;
  - d. potential aquifer sources for future municipal supplies.
- 4) Distance to sensitive receptors, such as surface waters and wetland areas
- 5) Provide background geologic data for the area from the following sources:
- a. USGS topographic map, and locus map and site plan developed from USGS topographic map;
  - b. USGS surficial geologic map;
  - c. USGS bedrock map;
  - d. USGS hydrogeologic atlas.

**C. Subsurface Work Necessary.** Provide the following information concerning wells.

- 1) Describe the location of a sufficient number of monitoring wells and multilevel well clusters (bedrock, deep, and water table well) in order to adequately provide these data:
- a. groundwater flow direction;
  - b. vertical hydraulic groundwater gradients;
  - c. overburden/bedrock hydraulic relationships;
  - d. groundwater quality in bedrock, at depth in the aquifer and at the water table interface;
  - e. permeabilities through the use of in-situ down hole permeability testing and sieve analysis of lithologic units encountered using the method described by the American Society for Testing Materials (ASTM);
  - f. contour contaminant maps (if necessary);
  - g. estimates of groundwater flow rates based on hydraulic gradients and permeabilities as encountered;
  - h. competency and type of bedrock through coring and/or rock quality determinations (wells should typically be screened in the upper 50 feet);
  - i. estimate of flow path of plume based on hydrogeologic data gathered during investigation;
  - j. determine fracture and joint pattern.
  - k. estimate high groundwater conditions using Department accepted methodologies

**Monitoring wells must be constructed according to DEP monitoring well guidelines. These guidelines are available in the DEP Publication *Standard References for Monitoring Wells*. See page 4 of these guidelines for details.**



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Guidance**

---

**D. Subsurface Testing and Samples.** Follow these procedures for soil borings and samples.

- 1) Soil borings must be drilled in accordance with the appropriate technique outlined in *Standard References for Monitoring Wells*.
- 2) Soil samples (and bedrock cores if applicable) must be collected in the deepest well at each well cluster.
- 3) Soil samples must be collected with a split spoon sampler utilizing (ASTM) guidelines for a sample retrieval and determination of strength.
- 4) Unless continuous sampling is warranted, soil samples must be collected:
  - a. at five foot intervals;
  - b. at changes in the stratigraphy;
  - c. at the water table.
- 5) Soil/bedrock samples shall be classified by a geologist using soil bedrock classifications set forth in *Standard References for Monitoring Wells*.
- 6) A field organic vapor detector such as HNU, Photo Vac, Organic Vapor Analyzer, or Photo Identification Detector should be used to screen the head space in soil jars.
- 7) Soil samples undergoing laboratory analysis for organic compounds must be collected in the appropriate jars and vials.
- 8) Infiltration tests on both primary and reserve effluent disposal areas.

**E. Water Quality Sampling and Parameters.** Please follow these procedures for water quality sampling.

- 1) Water quality parameters anticipated for analysis should be included in the Scope of Work. The parameters should be based on chemicals historically utilized at the site, or known to contribute to groundwater contamination.
- 2) Wells must be properly developed and purged prior to sample acquisition, as described in *Standard References for Monitoring Wells*.
- 3) Monitoring well sampling must be carried out according to the protocols described in *Standard References for Monitoring Wells*. Acceptable sampling techniques vary for differing parameters. For example, samples for Volatile Organic Analysis (VOA) must not be aerated during pumping, collection or bottling.
- 4) Must comply with chain of custody of protocols.

**F. Report Preparation.** The report should include the following items.

- 1) Discussion and inclusion of all items listed in the previous sections of this proposed Scope of Work.
- 2) A base map of appropriate scale incorporating geologic, hydrogeologic, subsurface and cultural features located at the site.



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Guidance**

---

- 3) Drillers' and geologists' logs for subsurface work.
- 4) Monitoring well construction details.
- 5) Survey data with respect to mean sea level (MSL). Include evaluations of:
  - a. benchmark utilized;
  - b. top of casing, but top of inner well screen pipe is preferable;
  - c. groundwater elevation at monitoring level, accurate to within 1/100 of a foot (see *Standard References for Monitoring Wells*);
  - d. water table.
- 6) Water table topography map.
- 7) Bedrock topography map.
- 8) Surficial geologic map.
- 9) Geologic cross-sections.
- 10) Groundwater profiles showing recharge/discharge areas, including existing and proposed stormwater infiltration basins, if appropriate and vertical/horizontal gradients.
- 11) Contaminant concentration maps for key chemical parameters of concern.
- 12) Calculate groundwater travel time from the disposal area to the nearest public water supply and/or sensitive receptor.
- 13) Conclusions concerning extent of contamination and potential health hazards.
- 14) Recommendations.
- 15) Proposed remedial activities.

**Note:** These guidelines cover new installations and groundwater remediation situations. When applying for a new permit, disregard items that apply to groundwater remediation only.

The publication *Standard References for Monitoring Wells* is available at the State House Bookstore. It is published by DEP's Bureau of Waste Site Cleanup and may be purchased for \$35.00 (not including postage).



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Guidance**

---

**Engineering Report Requirements**

*All groundwater discharge permit applications for which a treatment system is proposed must include an engineering report regarding wastewater treatment and plans for the effluent disposal area.*

The engineering report shall include, at a minimum, the following items:

- a. a general description of the facility (condominium, office park, laundramat, municipal system, etc.);
- b. a description of the number of employees and/or residents, bedrooms, apartments, elderly housing units, shifts and days of operation per week;
- c. a listing of raw materials used, such as but not limited to, chemicals, cleaning products, petroleum products, etc;
- d. a description of the sources of water supply including quantity and quality requirements;
- e. an identification of the sources of all sanitary and industrial wastes streams together with the quantity of flow and waste stream characteristics, including seasonal flow fluctuations, if any. In accordance with 310 CMR 30.302, a determination of whether any industrial waste stream is a hazardous waste stream shall be made for each industrial waste stream;
- f. a description of any by-product recovery systems;
- g. a listing and description of wastewater treatment studies performed;
- h. a description of liquid waste flow control measures;
- i. a description of any existing wastewater treatment system, including all design parameters;
- j. a description of reclaimed water opportunities
- k. a description of any anticipated new processes;
- l. a description of the proposed effluent quality;
- m. a listing and evaluation of wastewater treatment alternatives capable of meeting applicable effluent quality;
- n. a narrative description of the recommended plan for a wastewater treatment facility, based upon the preceding evaluation, with detailed design criteria, including flows and loads, number and size of unit processes and appurtenant facilities, unit loading, and a preliminary layout;
- o. a hydraulic profile in graphic form, on a sheet no larger than 11 inches by 17 inches, including the final effluent disposal area with water surface elevations at average, peak, and low flow conditions;
- p. a flow schematic, on a sheet no larger than 11 inches by 17 inches, including return lines, chemical feed lines, and sampling points;
- q. a description of redundancy requirements;



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Guidance**

---

- r. a discussion whether this is the initial phase of a larger project and, if so, how the design will accommodate future phases;
- s. a description of odor control provisions, as necessary;
- t. a description of safety provisions;
- u. a description and location of all chemicals stored, including spill containment provisions;
- v. an implementation schedule for the recommended plan;
- w. treatability and pilot study data on the ability of the proposed treatment system to treat the proposed discharge and meet applicable federal, state, and local requirements;
- x. an examination of the potential impact of any proposed discharge on municipal and private water supply wells, or POTW's, or surface water, whichever is applicable.

The engineering plans and specifications of a proposed wastewater treatment facility shall include, at a minimum, the following:

- a. materials of construction and specifications for all wastewater treatment system components;
- b. materials of construction and specifications for all wastewater collection system components;
- c. specifications for all instrumentation and alarms;
- d. a site plan and general plant layout;
- e. plan views and profile views, including dimensions showing existing and proposed piping and processing units related to industrial wastewater collection, treatment, and disposal.

**With the exception of the documents related to the effluent disposal area, the formal submission of engineering plans and specifications for the proposed wastewater treatment facility to the Department shall not be required.**

The engineering report, plans, and specifications shall be **stamped and signed** by a Massachusetts Registered Professional Engineer.



## Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Groundwater Discharge Permits

# BRP WP 05 Experimental or Alternative Treatment Technology or Permits Requiring Groundwater Reclassification Guidance

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The following is a list of information to be submitted to the Primary Permit Location for groundwater discharge permit applications with monitoring well proposals and with post-installation details. Monitoring wells are required in order to receive a groundwater discharge permit. See DEP publication *Standard References for Monitoring Wells*, Publication No. WSC-310-91 and 314 CMR 5.00 and 314 CMR 6.00.

Monitoring well proposals must include:

1. a locus map indicating the regional location of the sites. A USGS 1:25000 Scale 7 1/2 minute Topographic Series quadrangle sheet is most appropriate.
2. a site map to include:
  - a) location of proposed and existing monitoring wells, borings, test pits, deep holes and subsurface work;
  - b) cultural features (buildings, roads, leachfields, existing wells, subsurface utilities, etc.);
  - c) assumed groundwater flow directions.
3. any written descriptions of subsurface conditions expected to be encountered, e.g. published surficial geologic, bedrock, or hydrogeologic atlases (USGS), existing drillers' or geologists' logs, test pit or deep hole test results with percolation rates.
4. a well construction detail describing **construction materials** and **installation technique** should be included. Construction details should be patterned after the well construction guidelines concerning construction and screen placement. (See attached diagram.)

These materials must be submitted to and accepted by the Program prior to the installation of the monitoring well(s). The Program reserves the right to request additional information on a case-by-case basis if in the opinion of the Department the sensitivity of the potentially impacted area warrants additional investigation.

Following the acceptance of the monitoring well plan by the Program at the appropriate regional office and the installation of the well(s), the following materials must be submitted:

1. A site plan including:
  - a) all the features described in section 2a;
  - b) the as-built well locations;
  - c) groundwater contours and elevations based on monitoring well data.
2. Geologists' and drillers' logs for all monitoring wells.
3. Monitoring calculations describing potential mounding below the discharge.
4. A geologic cross-section utilizing three monitoring wells and including relevant features such as leaching fields, existing and proposed stormwater detention basins, subsurface utilities, streams, roadways, etc.
5. A background sampling of the monitoring wells for, at a minimum, the following parameters: water level, pH, specific conductance, alkalinity, nitrogen series, total phosphorus, orthophosphate, chloride and sodium.

If you have any questions please call Division of Watershed Permitting at 617-292-5673.





**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Permit Fact Sheet**

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**1. What is the purpose of this permit?**

These permits are required for liquid effluent discharge of sanitary sewage in excess of 10,000 gallons per day (gpd) to the ground. These permits serve to protect the public health, welfare, and the environment through the control of these discharges onto or into the ground. These permits are required when employing an experimental or alternative technology not previously approved by DEP for routine use in the Commonwealth, or for the reclassification of any aquifer or portion of an aquifer.

Legislative authority for this permit is stated in the Massachusetts General Laws, Chapter 21, Section 43. Regulatory authority for this permit is stated in 314 CMR 5.00.

**2. Who must apply?**

Any individual, business or organization proposing to treat and discharge to the ground sanitary wastewater in excess of 10,000 gpd employing an experimental or alternative technology not previously approved by DEP for routine use in the Commonwealth; any individual, business or organization seeking a reclassification of any aquifer or portion of an aquifer in accordance with the provisions of 314 CMR 6.05; or for projects requiring a permit not listed under major, minor, other, or reclamation categories.

If this category does not apply to you, please be advised these are not the only permit categories for discharges to the ground. Please consult regulations 310 CMR 4.00, 310 CMR 15.000, and 314 CMR 5.00 to determine whether another category may apply to you.

**3. What other requirements should be considered when applying for this permit?**

Permits of this type may have to meet criteria of DEP WPC Policy 92-2. Please call DEP to obtain a copy of this policy.

Permits of this type may require MEPA review. Please carefully examine 301 CMR 11.00, the MEPA Regulations, to determine if your project exceeds the MEPA review thresholds, or for more information contact the MEPA Unit of the Executive Office of Environmental Affairs (100 Cambridge ST., Suite 900, Boston, MA 02114; (617-626-1020). DEP cannot complete technical review of the permit application until the MEPA process has been concluded. Copies of MEPA filings (with reference to any applicable Transmittal numbers) should be sent to the appropriate program offices in Boston and the MEPA Coordinator in the appropriate Regional Office.

**Note:** These additional requirements are intended to serve as a guide to the applicant. They do not necessarily include all additional requirements.

**4. What is the application fee?**

The application fee is an amount negotiated between the applicant and DEP, in accordance with 310 CMR 4.05.



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Permit Fact Sheet**

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**5. What is the Primary Permit Location? What is the Reserve Copy Location?**

**PRIMARY PERMIT LOCATION**

**Department of Environmental Protection  
\*Regional Office  
Bureau of Resource Protection**

\*See "DEP addresses and Phone Numbers  
page included in this package

**RESERVE COPY LOCATION**

**Department of Environmental Protection  
Division of Watershed Permitting  
1 Winter Street  
Groundwater Discharge Permit Section  
Boston, MA 02108**

**6. What are the timelines?**

The timelines are negotiated between the applicant and DEP in accordance with 310 CMR 4.05.

**7. What is the annual compliance fee?**

The compliance fee is an amount negotiated between the applicant and DEP, in accordance with 310 CMR 4.05. If you fail to pay the annual compliance fee, your permit could be suspended or revoked.

**8. How long is this permit in effect?**

This permit is in effect for a maximum of 5 years as long as the applicant remains in compliance with appropriate laws and regulations, and as long as a compliance fee is paid.

**9. How can I avoid the most common mistakes made in applying for this permit?**

- a. Answer all questions on the application form and indicate "not applicable" (N/A) where appropriate. One copy of all application forms must have an original signature in ink.
- b. Applications for BRP WP 05 must include:
  - 1) A complete engineering report (including hydrogeologic data) stamped and signed by a Massachusetts Registered Professional Engineer.
  - 2) Final plans and specifications for the effluent disposal area stamped and signed by a Massachusetts Registered Professional Engineer
  - 3) Certification Statement for plans and specifications signed by a Massachusetts Registered Professional Engineer.
  - 4) A groundwater monitoring well plan.
  - 5) Documents clearly identifying the legal entity responsible for the ownership, proper operation, and maintenance of the proposed facility.
- c. Submit fee (once negotiated) and one copy of the DEP Transmittal Form to: Department of Environmental Protection, PO Box 4062, Boston, MA 02211.



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification**

# **Permit Fact Sheet**

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**10. What are the regulations that apply to this permit? Where can I get copies?**

These regulations include, but are not limited to:

- a. Groundwater Discharge Regulations, 314 CMR 5.00.
- b. Groundwater Quality Standards, 314 CMR 6.00.
- b. Timely Action and Fee Provisions, 310 CMR 4.00.
- c. Administrative Penalty Regulations, 310 CMR 5.00.

These may be purchased at:

State House Bookstore  
Room 116  
Boston, MA 02133  
617-727-2834

State House West Bookstore  
436 Dwight Street  
Springfield, MA 01103  
413-784-1376



**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Permits

**BRP WP 05 Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification  
Application Completeness Check List**

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- ☐ The DEP Transmittal Form is completed. If the applicant is a municipality, "Fee Exempt" has been selected from among the Special Provisions under the Amount Due section of the Transmittal Form.
- ☐ The Groundwater Discharge Application Form is properly filled out by the applicant and the consultant engineer and signed in ink.
- ☐ Engineering Report has been submitted.
- ☐ Hydrogeologic Evaluation Report has been submitted.
- ☐ Certification Statement for plans and specifications for the wastewater treatment facilities signed by a Massachusetts Registered Professional Engineer have been submitted.
- ☐ Final Engineering Plans and Specifications (signed and stamped by a Massachusetts Registered Professional Engineer) have been submitted.
- ☐ Groundwater Monitoring Well Plan has been submitted.
- ☐ Legal Ownership Documents have been submitted:
  - ☐ Articles of Incorporation
  - ☐ Master Deed
  - ☐ Declaration of Trust
  - ☐ Other

To submit the application package:

- ☐ Checklist items have been completed.
- ☐ Send two copies of the application along with one copy of the DEP Transmittal form to:

Department of Environmental Protection

\_\_\_\_\_ \* Regional Office

Division of Watershed Permitting

\*See "Addresses and Phone Numbers" page included in this package.

- ☐ Send one copy of the application along with one copy of the Transmittal Form to:  
Department of Environmental Protection  
Division of Watershed Permitting  
One Winter Street  
Boston, MA 02108

- ☐ Send negotiated fee in the form of a check or money order made payable to Commonwealth of Massachusetts, along with one copy of the DEP Transmittal Form to:  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211



## Massachusetts Department of Environmental Protection

# Addresses and Phone Numbers

DEP Boston  
One Winter Street  
Boston, MA 02108  
Telephone: (617) 292-5500  
Fax: (617) 556-1049  
TDD: (617) 574-6868

William X. Wall Experiment Station  
37 Shattuck Street  
Lawrence, MA 01843  
Fax: (978) 688-0352  
*Division of Environmental Analysis*  
Telephone: (978) 682-5237  
*Air Quality Surveillance*  
Telephone: (978) 975-1138

Office of Watershed  
Management  
627 Main Street  
Worcester, MA 01608  
Telephone: (508) 792-7470  
Fax: (508) 839-3469

Training Center  
627 Main Street, Worcester, MA 01608  
Telephone: (508) 767-2880  
Fax: (508) 849-4035  
*Residuals Sludge Management*  
Telephone: (508) 767-4011  
*WWT Operator Certification*  
Telephone: (508) 767-2880

DEP Western Region  
436 Dwight Street  
Suite 402  
Springfield, MA 01103  
Phone: (413) 784-1100  
Fax: (413) 784-1149



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Cummington  
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Deerfield  
Easthampton  
East Longmeadow  
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Florida  
Gill  
Goshen  
Granby  
Granville  
Great Barrington  
Greenfield  
Hadley

Hampden  
Hancock  
Hatfield  
Hawley  
Heath  
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Huntington  
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Longmeadow  
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Northfield  
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DEP Central Region  
627 Main Street  
Worcester, MA 01608  
Phone: (508) 792-7650  
Fax: (508) 792-7621  
TDD: (508) 767-2788



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20 Riverside Drive  
Lakeville, MA 02347  
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TDD: (508) 946-2795



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Dracut  
Essex  
Everett  
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Georgetown  
Gloucester  
Groveland  
Hamilton  
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Hingham  
Holbrook  
Hull  
Ipswich  
Lawrence  
Lexington  
Lincoln  
Lowell  
Lynn  
Lynnfield  
Malden  
Manchester-By-The-Sea  
Marblehead  
Medfield  
Medford  
Melrose

Merrimac  
Methuen  
Middleton  
Millis  
Milton  
Nahant  
Natick  
Needham  
Lynn  
Newburyport  
Newton  
Norfolk  
North Andover  
North Reading  
Norwood  
Peabody

Quincy  
Randolph  
Reading  
Revere  
Rockport  
Rowley  
Salem  
Salisbury  
Saugus  
Sherborn  
Somerville  
Stoneham  
Sudbury  
Swampscott  
Tewksbury  
Topsfield

Wakefield  
Walpole  
Waltham  
Watertown  
Wayland  
Wellesley  
Wenham  
West Newbury  
Weston  
Westwood  
Weymouth  
Wilmington  
Winchester  
Winthrop  
Woburn



**Massachusetts Department of Environmental Protection**  
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**BRP WP 05** Experimental or Alternative Treatment Technology  
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**BRP WP 42** Groundwater Reclamation Projects

Transmittal Number #

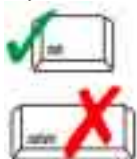
Facility ID (if known)

Application for Permit to Discharge to Groundwaters of the Commonwealth

## A. Applicant Information

**Important:**

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Name, address, location, and telephone number of facility producing the discharge:

Name

Address

City/Town

State

Zip Code

Telephone

2. Facility location:

Address

City/Town

State

Telephone

3. Contact Person:

Name

Title

Telephone

Owner

- ☐ Individual  
☐ Corporation  
☐ Partnership  
☐ Other

If other, please specify:

Status

- ☐ Private  
☐ Public  
☐ Other

If other, please specify:



**Massachusetts Department of Environmental Protection**  
Bureau of Resource Protection – Groundwater Discharge Permits

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

Transmittal Number # \_\_\_\_\_

**BRP WP 06** Major Groundwater Discharge Permit

Facility ID (if known) \_\_\_\_\_

**BRP WP 08** Minor Groundwater Discharge Permit

**BRP WP 10** Other Groundwater Discharges

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Application for Permit to Discharge to Groundwaters of the Commonwealth

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## B. Facility Operator

Give the name, as it is legally referred to, of the person, firm, public organization or other entity which operates the facility described in this application. If the facility owner is also the operator, write owner and list mailing address only if different from that listed in number 1 above.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/Town

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

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## C. Project Information

1. Does the project affect a site of historic or archeological significance, as defined in regulations of the Massachusetts Historical Commission, 950 CMR 71.00?

☐ Yes    ☐ No

2. Does this project require a filing under 301 CMR 11.00, the Massachusetts Environmental Policy Act?

☐ Yes    ☐ No

If yes, has a filing been made? (Please indicate the EOEA File Number)

☐ Yes    ☐ No

\_\_\_\_\_  
EOEA File Number

3. Is this a RCRA facility as defined in 314 CMR 8.03?

☐ Yes    ☐ No

If yes, submit the information on Form HW contained in 314 CMR 8.20 in accordance with the provisions of 314 CMR 8.08.

4. Are you seeking a reclassification of the groundwaters impacted by your discharge?

☐ Yes    ☐ No

If the answer to this question is yes additional information should be submitted pursuant to 314 CMR 6.00, The Massachusetts Groundwater Quality Standards.



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Groundwater Discharge Permits**

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

Transmittal Number # \_\_\_\_\_

**BRP WP 06** Major Groundwater Discharge Permit

Facility ID (if known) \_\_\_\_\_

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**BRP WP 42** Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

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**C. Project Information (cont.)**

5. Improvements - Are you required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ Yes      ☐ No

If yes, answer the following:

Description of order or agreement:

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Identification No. of Affected Treatment Facility \_\_\_\_\_

Description of Project

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Final Compliance Date \_\_\_\_\_

6. Has a hydrogeologic study been performed to determine the potential impact on the groundwater of the discharge or activity?

☐ Yes (please attach a copy)      ☐ No

7. Have plans and specifications for the treatment works been approved (see instructions) by the Department or if approved prior to July 1975, by the Department of Public Health? (If yes, please attach copy of plans and specifications and approval letter.)

☐ Yes      ☐ No





**Massachusetts Department of Environmental Protection**  
Bureau of Resource Protection – Groundwater Discharge Permits

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

Transmittal Number # \_\_\_\_\_

**BRP WP 06** Major Groundwater Discharge Permit

Facility ID (if known) \_\_\_\_\_

**BRP WP 08** Minor Groundwater Discharge Permit

**BRP WP 10** Other Groundwater Discharges

**BRP WP 11** Modification or Renewal with Plan Approval

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**BRP WP 42** Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

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**C. Project Information (cont.)**

8. Are there any groundwater monitoring wells currently in place in the vicinity of the discharge or proposed discharge? (If yes, please attach information on the type and location of the wells and available monitoring data.)

☐ Yes      ☐ No

9. Do you own the property at the discharge site? (Please provide legal ownership documents with the application.)

☐ Yes      ☐ No

10. Have opportunities for reclaimed water been evaluated?

☐ Yes      ☐ No

11. Is there a local regulation governing the construction of wastewater treatment facilities? (If so, please include a copy of the local approval.)

☐ Yes      ☐ No

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**D. Facility Information**

1. Facility Status: ☐ Existing      ☐ Proposed

2. When did or when will this discharge begin?

\_\_\_\_\_ date

3. Check type of establishment producing or contributing to discharge:

☐ Residential Housing

\_\_\_\_\_ Total number of bedrooms

☐ Remediation Project

☐ Other:

\_\_\_\_\_ Nature of Business

4. Design Flow:

\_\_\_\_\_ Daily Maximum gpd

- a) ☐ Check here if discharge occurs all year, or

- b) List months discharge occurs \_\_\_\_\_

- c) Number of days per week discharge occurs \_\_\_\_\_



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**Bureau of Resource Protection – Groundwater Discharge Permits**

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

**BRP WP 06** Major Groundwater Discharge Permit

**BRP WP 08** Minor Groundwater Discharge Permit

**BRP WP 10** Other Groundwater Discharges

**BRP WP 11** Modification or Renewal with Plan Approval

**BRP WP 12** Modification or Renewal without Plan Approval

**BRP WP 42** Groundwater Reclamation Projects

Transmittal Number # \_\_\_\_\_

Facility ID (if known) \_\_\_\_\_

Application for Permit to Discharge to Groundwaters of the Commonwealth

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**D. Facility Information (cont.)**

5. Basis for design flow:

☐ The State Environmental Code – Title 5

☐ Other: \_\_\_\_\_  
Specify

6. Type of treatment and disposal system for discharge to ground:

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7. Location and method of wastewater treatment solids disposal:

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8. If a commercial establishment:

A. Are any types of wastewater other than sanitary sewage produced?

☐ Yes

☐ No

If yes:

Specify type of wastewater \_\_\_\_\_

Quantity gpd \_\_\_\_\_

Method and location of disposal \_\_\_\_\_



**Massachusetts Department of Environmental Protection**  
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**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

Transmittal Number #

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**BRP WP 42** Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

---

**D. Facility Information (cont.)**

B. Are any hazardous wastes generated?

☐ Yes

☐ No

9. Does or will the treatment/disposal facility receive industrial wastes?

☐ Yes

☐ No

10. Location of Facility:

A. Is the facility located on Native American Lands? ☐ Yes ☐ No

B. GPS Coordinates:

- 1) Enter Latitude and Longitude to the nearest whole second for both the wastewater treatment facility and the effluent disposal area.
- 2) Provide a narrative description of the site and the feature to be permitted. As an example: "The site is on the west side of Main Street, the third building north of High Street. The disposal field lies 100 feet off the southwest corner of the building."
- 3) Attach a site map based on a USGS topographical map or MassGIS Color Ortho Photography that clearly indicates both your facility and the location of the discharge. The USGS topographical map is available on <http://maps.massgis.state.ma.us/MassGISTopos/viewer.htm> or the Color Orthophotography on <http://maps.massgis.state.ma.us/MassGISColorOrthos/viewer.htm>.

C. Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

- 1) The legal boundaries of the facility;
- 2) The location and serial number of each of your existing and proposed intake and discharge structures;
- 3) All hazardous waste management facilities;
- 4) All springs and surface water bodies in the area, plus all drinking water wells within one mile of the facility which are identified in the public record or otherwise known to you.
- 5) All Zone II's or IWPA's.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Groundwater Discharge Permits**

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

Transmittal Number # \_\_\_\_\_

**BRP WP 06** Major Groundwater Discharge Permit

Facility ID (if known) \_\_\_\_\_

**BRP WP 08** Minor Groundwater Discharge Permit

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**BRP WP 42** Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

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**D. Facility Information (cont.)**

D. Please list any public or private drinking water supply wells within 2,500 feet of the discharge area:

Well Location	Type of Well (Public/Private)	Status (Active/Inactive)	Safe Yield
_____	_____	_____	_____
_____	_____	_____	_____

**11. Water Supply Data**

A. List sources of water supply and annual water consumption for the past five years.

Water Sources	Year 1	Year 2.	Year 3.	Year 4.	Year 5.
1. _____	_____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____
Total:	_____	_____	_____	_____	_____

B. Please show the location of your water sources on the map described in question 10.

**Note:**  
Answer questions in section E only if you are applying for permits under categories BRP WP 10, BRP WP 42, or, if you are applying under BRP WP 08, when a car wash or laundromat will discharge to groundwater.

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**E. Required Information for Certain Categories**

**1. Flows, Sources of Pollution and Treatment Technologies**

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more defined descriptions in Item E.1.B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units and outfalls. If a water balance cannot be determined provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Groundwater Discharge Permits**

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

Transmittal Number #

**BRP WP 06** Major Groundwater Discharge Permit

Facility ID (if known)

**BRP WP 08** Minor Groundwater Discharge Permit

**BRP WP 10** Other Groundwater Discharges

**BRP WP 11** Modification or Renewal with Plan Approval

**BRP WP 12** Modification or Renewal without Plan Approval

**BRP WP 42** Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

---

**E. Required Information for Certain Categories (cont.)**

B. For each discharge, provide a description of:

- 1) All operations contributing wastewater to the effluent, cooling water and runoff;
- 2) The average flow contributed by each operation; and
- 3) The treatment received by the wastewater. (Attach additional sheets if necessary.)
- 4) With the exception of storm water runoff, leaks, or spills please note if any of the discharges described are intermittent or seasonal.

**Operations Contributing to Flow:**

Identification Number	Operations	Average Flow	Treatment

2. Effluent Limitations:

- A. List any pollutant you know or have reason to believe is discharged or may be discharged from the treatment facilities. For every pollutant you list, briefly describe the reason you believe it to be present, its approximate concentration in the discharge and any analytical data in your possession, which will support your statement. Additional wastewater analysis may be required as part of this application.

Pollutant	Concentration	Source	Available Data



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection – Groundwater Discharge Permits**

**BRP WP 05** Experimental or Alternative Treatment Technology  
or Permits Requiring Groundwater Reclassification

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**BRP WP 08** Minor Groundwater Discharge Permit

**BRP WP 10** Other Groundwater Discharges

**BRP WP 11** Modification or Renewal with Plan Approval

**BRP WP 12** Modification or Renewal without Plan Approval

**BRP WP 42** Groundwater Reclamation Projects

Transmittal Number # \_\_\_\_\_

Facility ID (if known) \_\_\_\_\_

Application for Permit to Discharge to Groundwaters of the Commonwealth

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**E. Required Information for Certain Categories (cont.)**

- B. Are your operations such that your raw materials, processed, or products can reasonably be expected to vary so that your discharges of pollutants may during the next five years exceed three times the approximate concentrations reported in item 2A?

☐ Yes (please explain)      ☐ No

---

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- C. Are you planning on adding any new processes over the next five years?

☐ Yes (please specify)      ☐ No

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- D. Are organic compounds used at your facility?

☐ Yes (please explain)      ☐ No

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3. Were any of the analyses or testing reported in item E.2.A. performed by a contract laboratory or consulting firm?

☐ Yes (please explain)      ☐ No

\_\_\_\_\_  
Name of Facility

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/Town

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Telephone



**Massachusetts Department of Environmental Protection**  
Bureau of Resource Protection – Groundwater Discharge Permits

**BRP WP 05** Experimental or Alternative Treatment Technology  
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**BRP WP 42** Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

---

## **E. Required Information for Certain Categories (cont.)**

4. Check any of the following that apply to this site:

A. ☐ Superfund Site

\_\_\_\_\_  
If yes, Federal ID #

☐ Bureau of Waste Site Cleanup  
Priority Site

\_\_\_\_\_  
If yes, File Number

☐ Bureau of Waste Site Cleanup  
Waiver Site (Please include a copy  
of the waiver with the application)

\_\_\_\_\_  
If yes, File Number

B. If the site is currently being regulated by the Bureau of Waste Site Cleanup, check any of the following that apply:

☐ Incident Response

☐ Short Term Measure

Please provide a copy of the letter of authorization if applicable.

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## **F. Certification**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I will be responsible for publication of public notice of the applicable permit proceedings identified under 314 CMR 2.06(1)(a) through (d)."

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Printed Name of Applicant

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Name of Preparer

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Title of Preparer